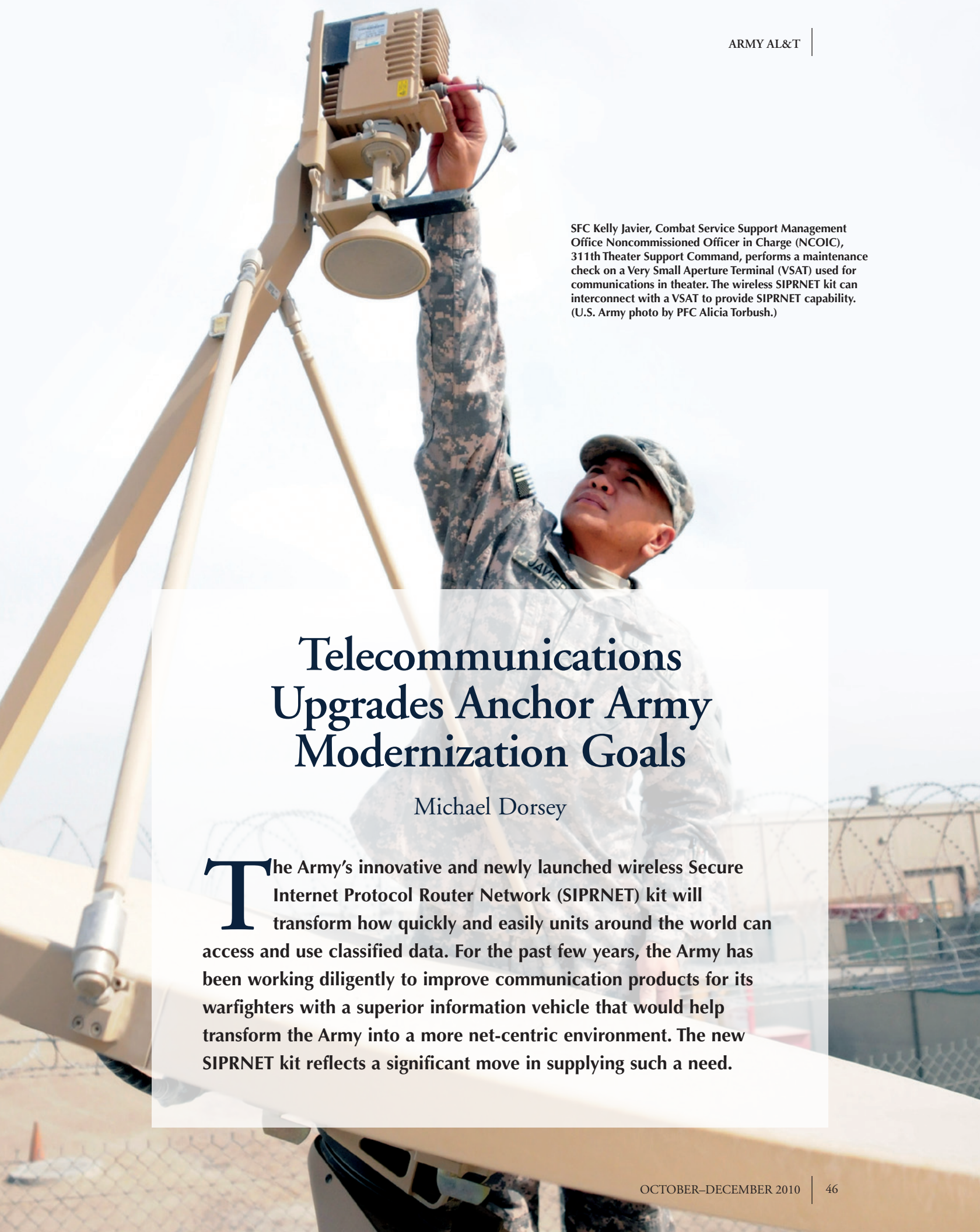

SFC Kelly Javier, Combat Service Support Management Office Noncommissioned Officer in Charge (NCOIC), 311th Theater Support Command, performs a maintenance check on a Very Small Aperture Terminal (VSAT) used for communications in theater. The wireless SIPRNET kit can interconnect with a VSAT to provide SIPRNET capability. (U.S. Army photo by PFC Alicia Torbush.)

Telecommunications Upgrades Anchor Army Modernization Goals

Michael Dorsey

The Army's innovative and newly launched wireless Secure Internet Protocol Router Network (SIPRNET) kit will transform how quickly and easily units around the world can access and use classified data. For the past few years, the Army has been working diligently to improve communication products for its warfighters with a superior information vehicle that would help transform the Army into a more net-centric environment. The new SIPRNET kit reflects a significant move in supplying such a need.

The Army's newly launched wireless SIPRNET kit is a quick, cost-effective, transportable device that provides Soldiers with on-the-go productivity. Here, SSG Stevie Jones (left), the U.S. Forces-Iraq (USF-I) J6 Communications Directorate Server Room NCOIC, and U.S. Air Force TSgt Samuel Sapiera, USF-I System Administrator, work on their mission of providing network core services on both the SIPRNET and Non-classified Internet Protocol Network throughout Camp Victory, Iraq, March 4, 2010. (U.S. Air Force photo by SMSgt Trish Bunting.)

The Program Executive Office Enterprise Information Systems (PEO EIS) Project Manager Network Service Center (PM NSC), working with U.S. Army Information Systems Engineering Command (ISEC), developed a secure communications system at an "unprecedented level of efficiency," said Miguel Buddle, Mobility Kit Project Lead for PM NSC.

Versatile Components

Buddle said that the SIPRNET kit, like a commercial broadband wireless card, is a quick, cost-effective, transportable device that provides Soldiers with on-the-go productivity. The kit comes in two parts:

- The Part A Component, which resides anywhere that has both a SIPRNET point-of-presence and a local area network (LAN) for use of the Non-classified Internet Protocol Network (NIPRNET).
- The Part B component, which supports the user and can be placed anywhere there is a local NIPRNET LAN drop. One Part A component can provide connectivity to one or more Part B components, thus expanding wired and wireless operational capability.

One kit can support three users in wireless connectivity and 20 users using wired connectivity.

The kit's versatility stems from its modular, flexible design. Both components can operate on 110- or 220-volt electrical power. The kit can interconnect with a Very Small Aperture Terminal to provide SIPRNET capability.

Once it is added to a facility and is hooked to non-secure network cables, anyone can receive access to the SIPRNET system. Secure communication is established across an unsecure network through encryption tunnels between the two components.

'An Excellent Solution'

The acceptability of the SIPRNET kit continues to rise quickly, thanks to the value it brings to organizations. At Camp Shelby, MS, the largest state-owned training site in the Nation, the 2-part kit has improved training efficiency.

Of Camp Shelby's more than 100 available buildings used for battalion and brigade elements, only four are physically wired for SIPRNET. However, the kits allowed the installation to accommodate 4,000 Soldiers over time without the huge investment in money, manpower, and materials needed to change building infrastructure. With 8,000 more people trained over the summer, "the kits have been an excellent solution for our posts because of so many visiting units. The speed is good, with no limitations," said LTC

With its state-of-the-art technology and expedient delivery, SIPRNET will help the Army successfully distribute and process information services to its warfighters.

Beverly Hartsfield, Telecommunications Program Coordinator at Camp Shelby.

SSG Terry Stewart, a member of Hartsfield's staff, agreed. "The first unit to use the kit had zero service calls for the kit itself," Stewart said. "The kit is truly plug-and-play. You plug it in and it works … it is extremely user friendly and portable."

In the past, delivering classified information often required hardened facilities, miles of installed wiring, and limited phone equipment. By developing and improving telecommunication products such as the SIPRNET kit, PM NSC continues to support the Army's infrastructure on and off the battlefield with technical efficiency and reliability. With its state-of-the-art technology and expedient delivery, SIPRNET will help the Army successfully distribute and process information services to its warfighters.

"The SIPRNET kit is a reflection of PM NSC's commitment to transform the Army to a more modular, net-centric, expeditionary force," said Robert Golden, NSC Project Manager. "The kits keep our sites in the Nation technologically current, thus allowing top-notch training that equates to a more combat-agile force—precisely what we want for our Soldiers, and nothing less."

Configuration Accounting Information Retrieval System

The NSC acquires and fields telecommunications infrastructure at Army installations worldwide. Providing project oversight, NSC works with commercial vendors to develop products, while ISEC validates information assurance compliance for the mobility kit.

Meanwhile, additional NSC efforts to upgrade the Army's telecommunications continue; a recently installed telephone network management system at home installations in Europe boosts both mission capability and morale for Soldiers and their Families abroad.

The SIPRNET kit is a reflection of PM NSC's commitment to transform the Army to a more modular, net-centric, expeditionary force.

NSC's Defense Communications Systems Europe (DCSE) Installation Information Infrastructure Modernization Program and the 5th Signal Command teamed up to modernize telephone communications at Army posts in Germany.

The Configuration Accounting Information Retrieval System (CAIRS) provides the capability to manage all of the communications infrastructure, telephone billing, telephone switch provisioning for voice and Voice over Internet Protocol telephones, cable and facilities management, directory operator services, and the ability to integrate third-party billing services for personal digital assistants, cell phones, and lease lines into one consolidated telephone bill. CAIRS will be used to order, manage, and report on all aspects of telecommunications in Europe.

Because of its design, CAIRS is interoperable with the Defense Switched Network (DSN), enhancing DSN as a management and reporting system.

"DSN connects every Soldier, Sailor, Airman, and Marine together and does it so seamlessly, no one appreciates it until it fails," LTC Joseph Dupont said earlier this year as PM DCSE. "This tool benefits the Soldier because it keeps the system running."

CAIRS provides 2-way connectivity between a central server at the Kaiserslautern Area Processing Center and one in Grafenwoehr. This arrangement services 31 Electronic Worldwide Switch Digital switches and 17 5th Signal Command-managed private branch exchanges. The system's connectivity is through Internet Protocol (IP) established between the area processing centers and each switch location.

The overflow of morale calls from the automated attendant to the telephone operators is expected to improve by 50 percent because of the IP process. CAIRS also automatically bills the calls through a digital toll ticket. Mission-related conference calls are expected to see the same 50 percent improvement.

With the rise in cyber communications, telephone DSN remains relevant and in high demand. As the European theater continues its transition to an IP network, a goal throughout the entire Army—improving telephone use by installing a computer processor-based platform like IP—makes the antiquated DSN system more effective and efficient, which brings ever more communications support to Soldiers stationed worldwide.

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